

RAW SEQUENCE LISTING

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Application Serial Number: 10/655, 915A
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DATE: 08/17/2006

PATENT APPLICATION: US/10/655,915A

TIME: 10:46:16

Input Set : A:\960296.99080 - SEQ ID LISTING.txt

Output Set: N:\CRF4\08172006\J655915A.raw

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3 <110> APPLICANT: Attie, Alan D
4     Stoehr, Jonathan P
5     Schueler, Kathryn L
6     Clee, Susanne M
8 <120> TITLE OF INVENTION: GENES ASSOCIATED WITH TYPE II DIABETES
10 <130> FILE REFERENCE: 960296.99080
12 <140> CURRENT APPLICATION NUMBER: 10/655,915A
13 <141> CURRENT FILING DATE: 2003-09-05
15 <150> PRIOR APPLICATION NUMBER: US 60/409,525
16 <151> PRIOR FILING DATE: 2002-09-09
18 <160> NUMBER OF SEQ ID NOS: 14
20 <170> SOFTWARE: PatentIn version 3.3
22 <210> SEQ ID NO: 1
23 <211> LENGTH: 5757
24 <212> TYPE: DNA
25 <213> ORGANISM: Homo sapiens
28 <220> FEATURE:
29 <221> NAME/KEY: CDS
30 <222> LOCATION: (228)..(3893)
32 <400> SEQUENCE: 1
33 atcaccctct ggacaagaga acgggcgagc gggagctagg agggaagagt ggagaggacc      60
35 ggcgaggcgc gccagccgga gccacctct tcccgccgc cccctcccca ctccccctac      120
37 acacacacgc tcgctcgctc gccggcgcg gcacaccccc cgcgccggac ccgcacctcg      180
39 cgggcgcca cacactcggc agcccagacc gcgtagccg cagcggg atg gag gcg      236
40                                     Met Glu Ala
41                                     1
43 gcg cgc acg gag cgc ccc gca ggc agg ccg ggg gcg ccg ctt gtc cgg      284
44 Ala Arg Thr Glu Arg Pro Ala Gly Arg Pro Gly Ala Pro Leu Val Arg
45     5                               10                               15
47 acg ggg ctc cta ctc ttg tcg acg tgg gtc ctg gcc ggc gcc gag atc      332
48 Thr Gly Leu Leu Leu Leu Ser Thr Trp Val Leu Ala Gly Ala Glu Ile
49 20                               25                               30                               35
51 act tgg gac gcg aca ggc ggt ccc gga cgc ccg gcg gcc ccg gct tcg      380
52 Thr Trp Asp Ala Thr Gly Gly Pro Gly Arg Pro Ala Ala Pro Ala Ser
53     40                               45                               50
55 cgg cca ccg gcg ttg tct cca ctc tcg ccg cgg gca gtg gcc agc cag      428
56 Arg Pro Pro Ala Leu Ser Pro Leu Ser Pro Arg Ala Val Ala Ser Gln
57     55                               60                               65
59 tgg ccg gag gag ctg gcg tcg gcg cgg aga gcc gcc gtg ctg ggg cgc      476
60 Trp Pro Glu Glu Leu Ala Ser Ala Arg Arg Ala Ala Val Leu Gly Arg
61     70                               75                               80
63 cgg gcc gga cca gag ctg ctg ccc cag cag ggc ggc ggc aga ggc ggt      524
64 Arg Ala Gly Pro Glu Leu Leu Pro Gln Gln Gly Gly Gly Arg Gly Gly

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65	85	90	95	
67	gag atg cag gtg gaa gcc gga ggg aca tca ccg gca ggc gag cgg cgg	572		
68	Glu Met Gln Val Glu Ala Gly Gly Thr Ser Pro Ala Gly Glu Arg Arg			
69	100 105 110 115			
71	ggc cgg ggc atc cca gct cct gcc aag ctt ggc ggc gcg agg agg agt	620		
72	Gly Arg Gly Ile Pro Ala Pro Ala Lys Leu Gly Gly Ala Arg Arg Ser			
73	120 125 130			
75	cgc cgg gcg cag ccc cca atc acc cag gaa cgc ggg gac gcc tgg gcc	668		
76	Arg Arg Ala Gln Pro Pro Ile Thr Gln Glu Arg Gly Asp Ala Trp Ala			
77	135 140 145			
79	act gct ccg gcc gat ggt tcc aga gga agc cgt ccc ctt gct aag ggt	716		
80	Thr Ala Pro Ala Asp Gly Ser Arg Gly Ser Arg Pro Leu Ala Lys Gly			
81	150 155 160			
83	tcc cgg gag gag gtg aag gcg ccg cgg gct ggg ggg tcg gcg gct gaa	764		
84	Ser Arg Glu Glu Val Lys Ala Pro Arg Ala Gly Gly Ser Ala Ala Glu			
85	165 170 175			
87	gac ctc cgg ctg ccc agc acc tcc ttc gcg ctg acc ggg gac tcg gcc	812		
88	Asp Leu Arg Leu Pro Ser Thr Ser Phe Ala Leu Thr Gly Asp Ser Ala			
89	180 185 190 195			
91	cac aac caa gcc atg gtg cac tgg tcg gga cac aac agc agc gtc ata	860		
92	His Asn Gln Ala Met Val His Trp Ser Gly His Asn Ser Ser Val Ile			
93	200 205 210			
95	ctt atc ctg acg aag ctg tat gac ttc aac ctg ggc agc gtg act gag	908		
96	Leu Ile Leu Thr Lys Leu Tyr Asp Phe Asn Leu Gly Ser Val Thr Glu			
97	215 220 225			
99	agt tca cta tgg agg tcg aca gat tat ggc acc acc tat gaa aag ctg	956		
100	Ser Ser Leu Trp Arg Ser Thr Asp Tyr Gly Thr Thr Tyr Glu Lys Leu			
101	230 235 240			
103	aat gac aaa gtg ggt ttg aag act gtc ctc agt tac ctc tat gtc aat	1004		
104	Asn Asp Lys Val Gly Leu Lys Thr Val Leu Ser Tyr Leu Tyr Val Asn			
105	245 250 255			
107	cca acc aac aaa agg aag att atg ctt ctc agt gat cct gag atg gag	1052		
108	Pro Thr Asn Lys Arg Lys Ile Met Leu Leu Ser Asp Pro Glu Met Glu			
109	260 265 270 275			
111	agc agc ata ttg atc agc tca gac gaa ggg gcg acc tat cag aag tat	1100		
112	Ser Ser Ile Leu Ile Ser Ser Asp Glu Gly Ala Thr Tyr Gln Lys Tyr			
113	280 285 290			
115	cgg ctc acc ttc tat atc cag agc ctg ctc ttt cat ccc aag caa gag	1148		
116	Arg Leu Thr Phe Tyr Ile Gln Ser Leu Leu Phe His Pro Lys Gln Glu			
117	295 300 305			
119	gac tgg gtg ctg gcc tac agt ttg gat caa aag ctc tac agc tcc atg	1196		
120	Asp Trp Val Leu Ala Tyr Ser Leu Asp Gln Lys Leu Tyr Ser Ser Met			
121	310 315 320			
123	gac ttt gga aga cgg tgg caa ctc atg cat gaa cgc atc aca ccc aac	1244		
124	Asp Phe Gly Arg Arg Trp Gln Leu Met His Glu Arg Ile Thr Pro Asn			
125	325 330 335			
127	agg ttt tat tgg tcg gtg gcc gga ttg gat aag gag gcg gac ctg gtg	1292		
128	Arg Phe Tyr Trp Ser Val Ala Gly Leu Asp Lys Glu Ala Asp Leu Val			
129	340 345 350 355			

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131	cac atg gag gtg cgg acc acg gat gga tat gct cac tac ctc acc tgc	1340
132	His Met Glu Val Arg Thr Thr Asp Gly Tyr Ala His Tyr Leu Thr Cys	
133	360 365 370	
135	agg atc cag gaa tgt gcc gag aca act aga agt ggg cct ttt gcc cgc	1388
136	Arg Ile Gln Glu Cys Ala Glu Thr Thr Arg Ser Gly Pro Phe Ala Arg	
137	375 380 385	
139	tcc att gac atc agt tcc ctg gtt gtc cag gat gaa tat atc ttc att	1436
140	Ser Ile Asp Ile Ser Ser Leu Val Val Gln Asp Glu Tyr Ile Phe Ile	
141	390 395 400	
143	cag gta aca act agt gga aga gcc agc tac tac gtg tct tat cga aga	1484
144	Gln Val Thr Thr Ser Gly Arg Ala Ser Tyr Tyr Val Ser Tyr Arg Arg	
145	405 410 415	
147	gag gcc ttt gct cag ata aag ctg cct aag tac tcg ttg cca aag gac	1532
148	Glu Ala Phe Ala Gln Ile Lys Leu Pro Lys Tyr Ser Leu Pro Lys Asp	
149	420 425 430 435	
151	atg cac atc atc agt aca gac gag aac caa gta ttt gct gcg gtc caa	1580
152	Met His Ile Ile Ser Thr Asp Glu Asn Gln Val Phe Ala Ala Val Gln	
153	440 445 450	
155	gaa tgg aac cag aat gac acg tac aac ctc tac atc tca gac acg cgt	1628
156	Glu Trp Asn Gln Asn Asp Thr Tyr Asn Leu Tyr Ile Ser Asp Thr Arg	
157	455 460 465	
159	ggg att tac ttc act ctg gcc atg gag aac atc aag agc agc aga ggt	1676
160	Gly Ile Tyr Phe Thr Leu Ala Met Glu Asn Ile Lys Ser Ser Arg Gly	
161	470 475 480	
163	cta atg ggg aac atc att att gaa ttg tat gag gta gca ggt atc aaa	1724
164	Leu Met Gly Asn Ile Ile Ile Glu Leu Tyr Glu Val Ala Gly Ile Lys	
165	485 490 495	
167	ggg ata ttt ctg gca aac aag aag gtg gac gac cag gtg aag aca tac	1772
168	Gly Ile Phe Leu Ala Asn Lys Lys Val Asp Asp Gln Val Lys Thr Tyr	
169	500 505 510 515	
171	atc act tac aac aaa ggc agg gat tgg cgc ctg ctg caa gct ccg gat	1820
172	Ile Thr Tyr Asn Lys Gly Arg Asp Trp Arg Leu Leu Gln Ala Pro Asp	
173	520 525 530	
175	gtg gac ctg aga gga agc cca gtg cac tgc ctg ctg ccc ttc tgt tcc	1868
176	Val Asp Leu Arg Gly Ser Pro Val His Cys Leu Leu Pro Phe Cys Ser	
177	535 540 545	
179	tta cat ctg cac ctg caa ctc tct gaa aat cca tat tcc tca gga aga	1916
180	Leu His Leu His Leu Gln Leu Ser Glu Asn Pro Tyr Ser Ser Gly Arg	
181	550 555 560	
183	atc tct agc aag gag aca gcc cca gga ctt gtg gtg gct aca ggc aac	1964
184	Ile Ser Ser Lys Glu Thr Ala Pro Gly Leu Val Val Ala Thr Gly Asn	
185	565 570 575	
187	att ggc ccg gag ctc tca tat act gat att ggt gtg ttc atc tcc tcc	2012
188	Ile Gly Pro Glu Leu Ser Tyr Thr Asp Ile Gly Val Phe Ile Ser Ser	
189	580 585 590 595	
191	gat ggg ggc aac aca tgg aga cag atc ttt gat gaa gag tac aat gtc	2060
192	Asp Gly Gly Asn Thr Trp Arg Gln Ile Phe Asp Glu Glu Tyr Asn Val	
193	600 605 610	
195	tgg ttc cta gac tgg ggt ggt gcc ctc gtg gcc atg aaa cac aca cct	2108

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196 Trp Phe Leu Asp Trp Gly Gly Ala Leu Val Ala Met Lys His Thr Pro
197      615      620      625
199 ctg cca gtc agg cat ttg tgg gtg agt ttt gat gag ggc cac tct tgg      2156
200 Leu Pro Val Arg His Leu Trp Val Ser Phe Asp Glu Gly His Ser Trp
201      630      635      640
203 gac aag tat ggt ttc act tgc gtt cct ctc ttt gtt gac ggg gct ctg      2204
204 Asp Lys Tyr Gly Phe Thr Ser Val Pro Leu Phe Val Asp Gly Ala Leu
205      645      650      655
207 gtg gag gca gga atg gag acc cac atc atg aca gtt ttt ggc cac ttc      2252
208 Val Glu Ala Gly Met Glu Thr His Ile Met Thr Val Phe Gly His Phe
209 660      665      670      675
211 agc ctc cgc tcc gaa tgg caa ttg gtg aaa gtg gac tac aaa tct atc      2300
212 Ser Leu Arg Ser Glu Trp Gln Leu Val Lys Val Asp Tyr Lys Ser Ile
213      680      685      690
215 ttc agc cgg cat tgc acc aag gag gac tat cag acc tgg cac ctg ctc      2348
216 Phe Ser Arg His Cys Thr Lys Glu Asp Tyr Gln Thr Trp His Leu Leu
217      695      700      705
219 aat cag gga gag cct tgt gtc atg gga gaa agg aaa ata ttc aag aaa      2396
220 Asn Gln Gly Glu Pro Cys Val Met Gly Glu Arg Lys Ile Phe Lys Lys
221      710      715      720
223 cgt aag cca gga gct cag tgt gcc ctg ggc cga gac cac tca gga tca      2444
224 Arg Lys Pro Gly Ala Gln Cys Ala Leu Gly Arg Asp His Ser Gly Ser
225      725      730      735
227 gtg gtc tca gaa ccc tgt gtc tgt gcc aat tgg gac ttc gag tgt gac      2492
228 Val Val Ser Glu Pro Cys Val Cys Ala Asn Trp Asp Phe Glu Cys Asp
229 740      745      750      755
231 tat ggg tat gag aga cat ggg gag agc cag tgt gtc cca gct ttc tgg      2540
232 Tyr Gly Tyr Glu Arg His Gly Glu Ser Gln Cys Val Pro Ala Phe Trp
233      760      765      770
235 tac aat cca gca tcc cca tca aag gac tgc agc ctt ggt caa agc tac      2588
236 Tyr Asn Pro Ala Ser Pro Ser Lys Asp Cys Ser Leu Gly Gln Ser Tyr
237      775      780      785
239 ctt aac agc act ggg tat cgg cgg att gtg tcc aac aac tgc aca gat      2636
240 Leu Asn Ser Thr Gly Tyr Arg Arg Ile Val Ser Asn Asn Cys Thr Asp
241      790      795      800
243 ggg cta agg gag aag tac acc gcc aag gcc cag atg tgc cct gga aaa      2684
244 Gly Leu Arg Glu Lys Tyr Thr Ala Lys Ala Gln Met Cys Pro Gly Lys
245      805      810      815
247 gcc cct cgg ggc ctc cat gtg gtg acg acc gat ggg cgg ctg gtg gca      2732
248 Ala Pro Arg Gly Leu His Val Val Thr Thr Asp Gly Arg Leu Val Ala
249 820      825      830      835
251 gag cag ggg cac aat gca act ttc atc atc ctc atg gag gag ggt gat      2780
252 Glu Gln Gly His Asn Ala Thr Phe Ile Ile Leu Met Glu Glu Gly Asp
253      840      845      850
255 cta caa agg aca aac atc cag ctt gac ttt ggg gat ggg att gct gtg      2828
256 Leu Gln Arg Thr Asn Ile Gln Leu Asp Phe Gly Asp Gly Ile Ala Val
257      855      860      865
259 tcc tac gca aac ttc agc ccc atc gag gac ggc atc aag cac gtg tat      2876
260 Ser Tyr Ala Asn Phe Ser Pro Ile Glu Asp Gly Ile Lys His Val Tyr

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261	870	875	880	
263	aag agt gcg ggg atc ttc	cag gtg aca gcc tat	gca gag aac aac ctt	2924
264	Lys Ser Ala Gly Ile Phe	Gln Val Thr Ala Tyr Ala	Glu Asn Asn Leu	
265	885	890	895	
267	ggc tca gac aca gct gtc	ctc ttc ctg cat gtg gtt	tgt cct gtg gag	2972
268	Gly Ser Asp Thr Ala Val	Leu Phe Leu His Val Val	Cys Pro Val Glu	
269	900	905	910	915
271	cat gtt cat ctc cga gtt	cca ttt gtt gcc ata aga	aat aag gag gtc	3020
272	His Val His Leu Arg Val	Pro Phe Val Ala Ile Arg	Asn Lys Glu Val	
273		920	925	930
275	aac atc agt gca gtc gtg	tgg ccc agt caa ctg ggg	acc ctt acc tat	3068
276	Asn Ile Ser Ala Val Val	Trp Pro Ser Gln Leu Gly	Thr Leu Thr Tyr	
277		935	940	945
279	ttc tgg tgg ttc ggc aat	agc aca aag cct ctc atc	act ttg gac agc	3116
280	Phe Trp Trp Phe Gly Asn	Ser Thr Lys Pro Leu Ile	Thr Leu Asp Ser	
281		950	955	960
283	agc att tcc ttc aca ttc	ctt gca gaa gga acc gac	acc atc aca gtc	3164
284	Ser Ile Ser Phe Thr Phe	Leu Ala Glu Gly Thr Asp	Thr Ile Thr Val	
285		965	970	975
287	cag gtg gct gct ggg aat	gcc ctc atc cag gac aca	aaa gag att gca	3212
288	Gln Val Ala Ala Gly Asn	Ala Leu Ile Gln Asp Thr	Lys Glu Ile Ala	
289	980	985	990	995
291	gtt cat gaa tat ttc	cag tcc cag ctt tta tca	ttc tct cct aat	3257
292	Val His Glu Tyr Phe	Gln Ser Gln Leu Leu	Ser Phe Ser Pro Asn	
293		1000	1005	1010
295	ctg gat tac cac aat	cct gac att cct gag	tgg aga aaa gat att	3302
296	Leu Asp Tyr His Asn	Pro Asp Ile Pro Glu	Trp Arg Lys Asp Ile	
297		1015	1020	1025
299	ggc aat gtc atc aag	cga gct ctg gtt aaa	gta acc agt gtc cca	3347
300	Gly Asn Val Ile Lys	Arg Ala Leu Val Lys	Val Thr Ser Val Pro	
301		1030	1035	1040
303	gag gac cag atc ctc	att gcc gtg ttt cct	ggt ctc ccc act tca	3392
304	Glu Asp Gln Ile Leu	Ile Ala Val Phe Pro	Gly Leu Pro Thr Ser	
305		1045	1050	1055
307	gca gag ctt ttc att	ctt cca ccc aag aac	ctg aca gag agg agg	3437
308	Ala Glu Leu Phe Ile	Leu Pro Pro Lys Asn	Leu Thr Glu Arg Arg	
309		1060	1065	1070
311	aaa ggc aat gaa ggg	gac ctg gaa caa att	gta gaa aca ctg ttt	3482
312	Lys Gly Asn Glu Gly	Asp Leu Glu Gln Ile	Val Glu Thr Leu Phe	
313		1075	1080	1085
315	aat gct ctc aac caa	aat ttg gtc cag ttt	gag ctg aag ccg ggg	3527
316	Asn Ala Leu Asn Gln	Asn Leu Val Gln Phe	Glu Leu Lys Pro Gly	
317		1090	1095	1100
319	gta caa gtc att gtg	tat gtc aca cag ctg	acg tta gct cca ttg	3572
320	Val Gln Val Ile Val	Tyr Val Thr Gln Leu	Thr Leu Ala Pro Leu	
321		1105	1110	1115
323	gtg gac tcc agt gct	ggg cac agc agc tca	gcc atg ctt atg cta	3617
324	Val Asp Ser Ser Ala	Gly His Ser Ser Ser	Ala Met Leu Met Leu	
325		1120	1125	1130

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